

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

6608 Hornwood Drive
Houston, Texas 77074SUBJECT: Laboratory Report: McGinnis Industrial
Maintenance Corporation

DATE: 5 JUN 1979

FROM: Chief, Laboratory Services Section, Houston Branch, 6ASAH

TO: Acting Director, S&A Division, 6ASA

THRU: Chief, Houston Branch, 6ASAH

*Put in McGinnis
file*

The following are the results of our analyses for certain classical parameters, trace metals, total phenols, total cyanides, and extractable semi-volatile organics by GC/MS performed on samples collected at the McGinnis Industrial Maintenance Corporation waste disposal site seven miles south of Hitchcock, Texas, by Mr. B. J. Pritchard and Miss Linda Melis on March 13, 1979.

Due to the nature of the Gas Chromatograph/Mass Spectrometric procedure, it is not possible to absolutely confirm the identity of all organic substances seen. Only those substances that are common with organics included on the list of 129 priority pollutants may be considered as confirmed. All others, which are identified by spectral matching with literature spectra rather than by comparison with an actual standard compound analysis, must be considered as tentative. Similarly, quantitative values for such compounds based on assumed instrument response factors must be considered as quantitative estimates.

1. HNB Sample No. 1913. McGinnis Industrial Maintenance Corp., seven miles south of Hitchcock, Texas. Source: Barge Water (Intake), taken at 1000 hours, 3/13/79.

Parameter AnalyzedConcentration Found

BOD ₅	2,300	mg/l (ppm)
COD	4,840	"
TOC	1,590	"
TSS	1,395	"
VSS	825	"
Oil & Grease	75.7	"
Total Cyanide	0.118	"
Total Phenols	2.34	"

Trace Metals

Antimony, Sb	<20	ug/l (ppb)
Arsenic, As	46	"



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Beryllium, Be	<20	ug/l (ppb)
Cadmium, Cd	50	"
Chromium, Cr	520	"
Copper, Cu	250	"
Lead, Pb	470	"
Mercury, Hg	< 0.2	"
Nickel, Ni	290	"
Selenium, Se	16	"
Silver, Ag	120	"
Thallium, Tl	<20	"
Zinc, Zn	760	"

Organics by GC/MS

Phenol (specific compound)	430	ug/l (ppb)
Methoxy phenol	170	"
Cresol (2 isomers) Isomer 1	210	"
Isomer 2	2,700	"
Dimethyl phenol	110	"
Propyl phenol	420	"
C ₄ -Alkyl Benzene	20	"
Limonene	15	"
Terpineol	20	"
Bis (2-ethyl hexyl) phthalate	3,000	"
Aliphatic hydrocarbons (numerous)	Major components	

2. HNB Sample No. 1914. McGinnis Industrial Maintenance Corp., seven miles south of Hitchcock, Texas. Source: Main Oxidation Effluent, taken at 1230 hours, 3/13/79.

TDNR permit Max. CR TDNR		
BOD ₅	40 mg/l	35-50
✓ COD	300 mg/l	< 2
TOC		100
TSS	90 mg/l	43
VSS		20
Oil & Grease		4
Total Cyanides		< 1
Total Phenols		< 0.01
		0.036

Trace Metals

Antimony, Sb	<20	ug/l (ppb)
Arsenic, As	<20	"
Beryllium, Be	<20	"
Cadmium, Cd	<20	"
Chromium, Cr	<20	"
Copper, Cu	<20	"
Lead, Pb	90	"

Mercury, Hg	< 0.2	ug/l (ppb)
Nickel, Ni	60	"
Selenium, Se	<10	"
Silver, Ag	20	"
Thallium, Tl	<20	"
Zinc, Zn	110	"

Organics by GC/MS

None of the organic substances seen in Sample 1913 reported above were observed in Sample 1914 except for bis (2-ethyl hexyl) phthalate at an estimated concentration level of 70 ug/l (ppb). No other organic compounds were detected by our Gas Chromatographic/Mass Spectrometric procedure as applied to the solvent extracts of this sample.

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